

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph bridging pages 8 and 9 with the following amended paragraph:

A second preferred embodiment of the present invention will be described hereinafter.

FIG. 5A and 5B show the detecting a period of input signals by 4 times of the reference clock . A sampling interval B having the zero cross point z therein is equally divided into 5 sub-sectors.

When an analogue signal a is constantly input, the count value c of each clock b is determined as +4 contrast to +2 in the first preferred embodiment of the present invention. The zero cross point z is predicted based on the ratio of the digital values y3 and y4 of the sampling points p3 and p4, and the distances of the sampling points p3 and p4 toward the zero cross point ~~*1x3~~ and ~~*2x4~~.

Please delete the present Abstract of the Disclosure.

Please add the following new Abstract of the Disclosure:

A device and method for detecting a period of an input signal including a count value setting portion; an A/D converter; a zero cross point detecting portion to detect a symbol change of digital values received from the A/D converter; an arithmetic processing unit; a counter; and a period value calculating portion. The arithmetic processing unit divides two sampling sectors, having a zero cross point in their center, by a preset value which is set in the count value setting portion, predicts a zero cross point sector based on the digital values of two sampling points, and calculates a count value of the reference clock in accordance with the predicted zero cross point sector and the preset value which is set in the count value setting portion.